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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,191	05/06/2004	Nicola M. Funnell	1578.612 (11766-US-PAT)	7248
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/840,191	Applicant(s) FUNNELL ET AL.	
	Examiner BOBBAK SAFAIPOUR	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/25/2008 has been entered.

Claims 1-32 have been cancelled. **Claims 33-65** are still pending in the present application.

Response to Arguments

In the Office Action dated July 10, 2008, the Examiner disclosed that if the Applicants intends to differentiate between the initialization and dormant (idle) state of the Jang reference (US 2003/0211847 A1) and the one member corresponding to a cell which is not currently supporting the first connected mode state of the present application, then such differences should be made explicit in the claims.

The Applicants have amended the independent claims to distinguish better the invention of the present application. As a result, the previous rejection with regards to Jang et al. (US 2003/0211847 A1) has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Vialen et al. (US 6,917,807) in view of Czaja et al. (US 7,006,828 B1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 33-65 rejected under 35 U.S.C. 103(a) as being unpatentable over **Vialen et al.** (US 6,917,807; hereinafter **Vialen**) in view of **Czaja et al.** (US 7,006,828 B1; hereinafter **Czaja**).

Consider **claim 33**, Valen discloses a method to select a cell in a mobile communications equipment (MCE), the MCE configurable for use in a cellular network (abstract), the method comprising:

beginning state transition activity, the MCE currently in the connected mode state (figures 2-4; col. 3, lines 53 to col. 4, line 13; signaling between UTRAN and UE);

identifying a candidate cell set, the candidate cell set members corresponding to UMTS-based candidate cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested), and

selecting a candidate cell from the identified set of candidate cells (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Valen fails to specifically disclose transitioning from a connected mode state to an idle mode state; at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state; and transitioning to an idle mode state.

In related art, Czaja discloses transitioning from a connected mode state to an idle mode state (col. 4, lines 18-27; switching from the CDMA channels of the serving base station to the CDMA channels of the target base station produces a momentary interruption in the continuity of the radio link between the mobile station and the base stations); at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state (col. 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communications with a different base station); and transitioning to an idle mode state (col. 3, lines 2-25; col. 4, lines 18-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of Vialen to monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claim 42**, Vialen discloses a mobile communications equipment (MCE) configured for use in a cellular network (abstract), comprising: a processor and operating environment configured to run software processes, the software processes configured to determine a set of UMTS-based candidate cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested), configured to select a candidate cell from the identified set of candidate cells (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a connected mode state to an idle mode state; at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state; and transitioning to an idle mode state.

In related art, Czaja discloses transitioning from a connected mode state to an idle mode state (col. 4, lines 18-27; switching from the CDMA channels of the serving base station to the CDMA channels of the target base station produces a momentary interruption in the continuity of the radio link between the mobile station and the base stations); at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state (col. 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the

mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communications with a different base station); and transitioning to an idle mode state (col. 3, lines 2-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of Vialen to monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claim 51**, Vialen discloses a method to select a cell in a mobile communications equipment (MCE) the MCE configurable for use in a cellular network (abstract), the method comprising:

beginning state transition activity, the MCE currently in the first connected mode state (figures 2-4; col. 3, lines 53 to col. 4, line 13; signaling between UTRAN and UE);

identifying a set of UMTS based candidate cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested);

selecting a candidate cell from the identified set of candidate cells (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose when transitioning from a first connected mode state to a second connected mode state, and at least one if the candidate cells is a cell which is not currently supporting the first connected mode state transitioning to the second connected mode

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state using the selected candidate cell, where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA PCH.

In related art, Czaja discloses disclose when transitioning from a first connected mode state to a second connected mode state (col. 3, lines 2-25; col. 4, lines 18-27), and at least one if the candidate cells is a cell which is not currently supporting the first connected mode state transitioning to the second connected mode state using the selected candidate cell (col. 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communications with a different base station), where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA PCH (col. 7, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of Vialen to monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claim 59**, Vialen discloses a mobile communications equipment (MCE) configured for use in a cellular network (abstract), comprising: a processor and operating environment configured to run software processes, the software processes configured to determine set of UMTS based candidate cells (figure 2-4; col. 4, lines 13-65; selection of cell to be suggested), configured to select a candidate cell from the identified set of candidate cells (figures 2-4; col. 3, lines 53 to col. 4, lines 13; selection of cell).

Vialen fails to specifically disclose a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a first connected mode state to a second connected mode state, and further comprising at least one of the set of candidate cells is a cell which is not currently supporting the first connected mode state to use the selected candidate cell when transitioning to the second connected mode state where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA_PCH.

In related art, Czaja discloses a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a first connected mode state to a second connected mode state (col. 3, lines 2-25; col. 4, lines 18-27), and further comprising at least one of the set of candidate cells is a cell which is not currently supporting the first connected mode state to use the selected candidate cell when transitioning to the second connected mode state (col. 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communications with a different base station) where the first and second connected mode states are, each, one of: Cell_FACH, Cell_PCH, and URA_PCH (col. 7, lines 1-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of Vialen to monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claims 34, 43, 52, and 60** and **as applied to claims 33, 42, 51, and 59 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein said at least one of the candidate cells which is not currently supporting the connected mode state is a cell identified to the MCE by a network. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claims 35, 44, 53, and 61** and **as applied to claims 33, 42, 51, and 59 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein said at least one of the candidate cells which is not currently supporting the connected mode state is a cell neighboring a cell supporting the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claims 36, 45, 54, and 62** and **as applied to claims 33, 42, 51, and 59 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein storing information relating to at least one candidate cell which is not currently supporting the connected mode state arising from past data gathering by the MCE. (Czaja: col 3, lines 2-25 and col. 4, lines 18-27)

Consider **claims 37, 46, and 55** and **as applied to claims 36, 45, and 54 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein said stored information stored comprises power measurement data. (Czaja: col 3, lines 2-25 and col. 4, lines

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18-27)

Consider **claims 38, 47, 56, and 63** and **as applied to claims 37, 46, 55, and 62 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein storing information comprising power measurements with respect to a plurality of candidate cells of the identified candidate cell set, the information gathered previous to the beginning state transition activity; and selecting the selected candidate cell based at least in part on said power measurements. (Czaja: col 3, lines 2-25 and col. 4, lines 18-27)

Consider **claims 39, 48, and 57** and **as applied to claims 33, 42, and 51 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein the connected mode state comprises one of Cell_DCH, Cell_FACH, Cell_PCH, and URA_PCH. (Vialen: col. 2, lines 18-26)

Consider **claims 40, 49, 58, and 64** and **as applied to claim 33, 42, 51, and 59 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein the identified candidate cell set comprises active cell(s) used to support the connected mode state. (Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Consider **claims 41, 50, and 65** and **as applied to claims 33, 42, and 59 above, respectively**, Vialen, as modified by Czaja, discloses the claimed invention wherein the

identified candidate cell set comprises the serving cell used to support the connected mode state.
(Vialen: figures 2-4; col. 3, lines 53 to col. 4)

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipoor whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Bobbak Safaipoor/
Examiner, Art Unit 2618

November 21, 2008

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618